

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/003488

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B23K26/24 B23K33/00 B60J5/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B23K B60J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 200 997 A (BAYERISCHE MOTOREN WERKE AG) 12 November 1986 (1986-11-12) cited in the application page 3	1-3,5-9
Y	DE 199 32 415 C (THYSSEN KRUPP IND AG) 15 February 2001 (2001-02-15) cited in the application figure 3	1-7,9
Y	US 5 221 585 A (NAGEL GREGORY L ET AL) 22 June 1993 (1993-06-22) column 1, lines 63,64 column 4, lines 2-19 figure 4	1-7,9
	-/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the International filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\* & \* document member of the same patent family

Date of the actual completion of the international search

29 June 2004

Date of mailing of the international search report

06/07/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Jaeger, H

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/003488

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 03/022612 A (SANKEI GIKEN KOGYO KK ; IIDA KAZUNARI (JP); OGAWA TAKASHI (JP); SUZUKI) 20 March 2003 (2003-03-20) figures 4,5 -----	1-9
A	US 2001/029702 A1 (HEUEL GERHARD) 18 October 2001 (2001-10-18) paragraphs '0008!', '0009!', '0019!'; figures -----	1-9

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/003488

Patent document - cited in search report		Publication date	Patent family member(s)		Publication date
EP 0200997	A	12-11-1986	DE	3515598 A1	06-11-1986
			EP	0200997 A2	12-11-1986
DE 19932415	C	15-02-2001	DE	19932415 C1	15-02-2001
US 5221585	A	22-06-1993	US	4993619 A	19-02-1991
			DE	4023393 A1	07-02-1991
			IT	1241496 B	17-01-1994
			JP	3133582 A	06-06-1991
WO 03022612	A	20-03-2003	JP	2003072375 A	12-03-2003
			CA	2458329 A1	20-03-2003
			EP	1423288 A1	02-06-2004
			WO	03022612 A1	20-03-2003
			TW	544409 B	01-08-2003
US 2001029702	A1	18-10-2001	DE	10013868 A1	20-09-2001
			DE	50102091 D1	03-06-2004
			EP	1129878 A2	05-09-2001